


Summary of EN 12975 Test Results,						Licence Number		011-7S1963 R			
annex to Solar KEYMARK Certificate						Issued		2014-07-22			
Company holding the		Jiangsu Jinta New Energy Technology Co.,Ltd				Country		China			
Brand (optional)		Abrand				Website		www.jinta-solar.com			
Street, street number		No 1-1 Xiayao Bridge Road				E-mail		postmaster@jintasolar.com			
Postal Code / City, province		Jiangsu	Changjing Town Jiangyincity			Tel/Fax		86 0519-82525310/ -			
Collector Type (flat plate glazed/un-glazed; evacuate tubular)						Evacuated tubular collector					
Thermal / photo voltaic hybrid collector? (PVT collector)						No					
Integration in the roof possible ? (manufacturers declaration)						No					
Collector name	Aperture area (Aa) m ²	Gross length mm	Gross width mm	Gross height mm	Gross area (AG) m ²	Power output per collector module					
						G = 1000 W/m ²					
						Tm-Ta					
						0 K	10 K	30 K	50 K	70 K	
						W	W	W	W	W	
JT-1800/58-30-ST	3.45	2 050	2 462	185	5.05	2 132	2 060	1 907	1 743	1 568	
JT-1800/58-24-ST	2.76	2 050	1 982	185	4.06	1 706	1 648	1 526	1 395	1 255	
JT-1800/58-22-ST	2.53	2 050	1 822	185	3.74	1 564	1 511	1 399	1 278	1 150	
JT-1800/58-20-ST	2.30	2 050	1 662	185	3.41	1 421	1 373	1 271	1 162	1 046	
JT-1800/58-18-ST	2.07	2 050	1 502	185	3.08	1 279	1 236	1 144	1 046	941	
JT-1800/58-16-ST	1.84	2 050	1 342	185	2.75	1 137	1 099	1 017	930	837	
JT-1800/58-12-ST	1.38	2 050	1 022	185	2.10	853	824	763	697	627	
JT-1800/58-10-ST	1.15	2 050	862	185	1.77	711	687	636	581	523	
Performance test method						Glazed liquid heating collector - steady state - outdoor					
Performance parameters related to aperture area		η0	a1	a2							
Units		-	W/(m ² K)	W/(m ² K ²)							
Test results - Flow rate and fluid see note 1		0.618	2.054	0.004							
Bi-directional incidence angle modifiers?		Yes	Kθ values are obligatory for 50°.								
Incidence angle modifiers Kθ(θT) transversal direction		Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
		Kθ(θT)	0.99	1.04	1.10	1.18	1.36	1.32	1.13		0.00
Incidence angle modifiers Kθ(θL) longitudinal direction		Angle	10°	20°	30°	40°	50°	60°	70°	80°	90°
		Kθ(θL)	1.00	0.99	0.98	0.97	0.94	0.90	0.81		0.00
Stagnation temperature - Weather conditions see note 2						Tstg	226 °C				
Effective thermal capacity						ceff = C/Ag	15.01 kJ/(m ² K)				
Max. intended operation temperature - see note 3						Tmax,op	°C				
Max. operation pressure - see note 3						pmax,op	600 kPa				
Pressure drop table - for a collector family, the values shall be for the module with highest ΔP per m² aperture area											
Flow rate	kg/(s m ²)										
Pressure drop, ΔP	Pa										
Optional weather data		Location				Link					
Testing Laboratory		TÜV Rheinland Energie und Umwelt GmbH									
Website		www.tuv.com/solarthermal									
Test report id. number		21212039a_EN_P1; 21222039a_EN_P2; 21222039_EN_R				Date of test report		2010-12-07; 2010-12-07; 2012-07-06			
During the test GDIF/GTOT was always between		0.11	and	0.86							
Comments of testing laboratory:											
Example comment.											
Note 1	Flow rate	0.023 kg/(s m ²)	Fluid	Water							
Note 2	Irradiance, G = 1000 W/m ² ; Ambient temperature, Ta=30 °C										
Note 3	Given by manufacturer										
 Datasheet version: 4.05, 2013-11-07											
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Annual collector output based on EN 12975 Test Results, annex to Solar KEYMARK Certificate	Licence Number	011-7S1963 R
	Issued	22.07.2014

Annual collector output kWh/module															
Collector name	Location and collector temperature (T _m)														
	Athens			Davos			Stockholm			Würzburg					
	25°C	50°C	75°C	25°C	50°C	75°C	25°C	50°C	75°C	25°C	50°C	75°C			
JT-1800/58-30-ST	3 906	3 191	2 537	3 162	2 539	1 988	2 316	1 793	1 358	2 506	1 940	1 458			
JT-1800/58-24-ST	3 125	2 553	2 029	2 529	2 031	1 590	1 853	1 434	1 087	2 005	1 552	1 167			
JT-1800/58-22-ST	2 864	2 340	1 860	2 319	1 862	1 458	1 698	1 315	996	1 838	1 423	1 070			
JT-1800/58-20-ST	2 604	2 128	1 691	2 108	1 693	1 325	1 544	1 195	906	1 670	1 294	972			
JT-1800/58-18-ST	2 343	1 915	1 522	1 897	1 523	1 193	1 389	1 076	815	1 503	1 164	875			
JT-1800/58-16-ST	2 083	1 702	1 353	1 686	1 354	1 060	1 235	956	725	1 336	1 035	778			
JT-1800/58-12-ST	1 562	1 277	1 015	1 265	1 016	795	926	717	543	1 002	776	583			
JT-1800/58-10-ST	1 302	1 064	846	1 054	846	663	772	598	453	835	647	486			

Collector mounting: Fixed or tracking	Fixed; slope = latitude - 15° (rounded to nearest 5°)
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Overview of locations				
Location	Latitude °	G _{tot} kWh/m ²	T _a °C	Collector orientation or tracking mode
Athens	38	1 765	18.5	South, 25°
Davos	47	1 714	3.2	South, 30°
Stockholm	59	1 166	7.5	South, 45°
Würzburg	50	1 244	9.0	South, 35°

G _{tot}	Annual total irradiation on collector plane	kWh/m ²
T _a	Mean annual ambient air temperature	°C
T _m	Constant collector operating temperature (mean of in- and outlet temperatures)	°C

The calculation of the annual collector performance is performed with the official Solar Keymark spreadsheet tool ScenoCalc. The collector output is calculated hour by hour according to the efficiency parameters from the Keymark test using constant collector operating temperature (T_m). A detailed description of the calculations is available at <http://www.sp.se/en/index/services/solar/ScenoCalc/Sidor/default.aspx>.

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	4.05, 2013-11-07
	ScenoCalc version:
	Ver. 4.05 (Nov, 2013)